

WHAT IS CLAIMED IS:

1. A method of inducing apoptosis in a bcl-6-expressing cell, comprising contacting
said bcl-6-expressing cell with a composition that reduces an amount of said bcl-6
protein or of a ribonucleic acid molecule encoding said bcl-6 protein, thereby
5 inducing apoptosis in a bcl-6-expressing cell.
2. The method of claim 1, wherein said cell is a lymphoma cell.
3. The method of claim 2, wherein said lymphoma cell is a non-Hodgkin's lymphoma
cell.
4. A method of treating a subject with a lymphoma comprising a bcl-6-expressing
10 lymphoma cell, comprising contacting said subject with a composition that reduces
an amount of said bcl-6 protein or of a ribonucleic acid molecule encoding said bcl-
6 protein, thereby treating a subject with cancer comprising a bcl-6-expressing cell.
5. The method of claim 4, wherein said lymphoma is a non-Hodgkin's lymphoma.
6. A method of inducing apoptosis in a bcl-6-expressing cell, comprising contacting
15 said bcl-6-expressing cell with a composition comprising a nucleic acid molecule
complementary to a region of a ribonucleic acid molecule encoding said bcl-6
protein, thereby inducing apoptosis in a bcl-6-expressing cell.
7. The method of claim 6, wherein said cell is a lymphoma cell.

8. The method of claim 7, wherein said lymphoma cell is a non-Hodgkin's lymphoma cell.
9. The method of claim 6, wherein said nucleic acid molecule is an oligodeoxyribonucleic acid (ODN) molecule.
- 5 10. The method of claim 6, wherein nucleic acid molecule has a sequence selected from the sequences set forth in SEQ ID No: 2, 6, 7, or 10 or a fragment thereof.
11. A method of treating a subject with a lymphoma comprising a bcl-6-expressing lymphoma cell, comprising contacting said subject with a composition comprising a nucleic acid molecule complementary to a region of a ribonucleic acid molecule
10 encoding said bcl-6 protein, thereby treating a subject with cancer comprising a bcl-6-expressing cell.
12. The method of claim 11, wherein said lymphoma is a non-Hodgkin's lymphoma.
13. The method of claim 11, wherein said nucleic acid molecule is an oligodeoxyribonucleic acid (ODN) molecule.
- 15 14. The method of claim 11, wherein nucleic acid molecule has a sequence selected from the sequences set forth in SEQ ID No: 2, 6, 7, or 10 or a fragment thereof.
15. A method of inducing apoptosis in a bcl-6-expressing cell, comprising contacting said bcl-6-expressing cell with a composition comprising a nucleic acid molecule

corresponding to a region of a ribonucleic acid molecule encoding said bcl-6 protein, thereby inducing apoptosis in a bcl-6-expressing cell.

16. The method of claim 15, wherein said cell is a lymphoma cell.
17. The method of claim 16, wherein said lymphoma cell is a non-Hodgkin's lymphoma cell.
18. The method of claim 15, wherein said nucleic acid molecule is a short interfering ribonucleic acid (siRNA) molecule.
19. The method of claim 15, wherein said nucleic acid molecule is a short hairpin RNA (shRNA) molecule.
20. The method of claim 15, wherein said region has a sequence complementary to the sequences set forth in SEQ ID No: 2, 6, 7, or 10 or a fragment thereof.
21. A method of treating a subject with a lymphoma comprising a bcl-6-expressing lymphoma cell, comprising contacting said subject with a composition comprising a nucleic acid molecule corresponding to a region of a ribonucleic acid molecule encoding said bcl-6 protein, thereby treating a subject with cancer comprising a bcl-6-expressing cell.
22. The method of claim 21, wherein said lymphoma is a non-Hodgkin's lymphoma.

23. The method of claim 21, wherein said nucleic acid molecule is a short interfering ribonucleic acid (siRNA) molecule.
24. The method of claim 21, wherein said nucleic acid molecule is a short hairpin RNA (shRNA) molecule.
- 5 25. The method of claim 21, wherein said region has a sequence complementary to the sequences set forth in SEQ ID No: 2, 6, 7, or 10 or a fragment thereof.
26. A method of inducing apoptosis in a bcl-6-expressing cell, comprising contacting said bcl-6-expressing cell with a vector expressing a nucleic acid molecule complementary to a region of a ribonucleic acid molecule encoding said bcl-6
10 protein, thereby inducing apoptosis in a bcl-6-expressing cell.
27. The method of claim 26, wherein said cell is a lymphoma cell.
28. The method of claim 27, wherein said lymphoma cell is a non-Hodgkin's lymphoma cell.
29. The method of claim 26, wherein said vector is a lentiviral vector.
- 15 30. The method of claim 26, wherein said nucleic acid molecule is an oligodeoxyribonucleic acid (ODN) molecule.
31. The method of claim 26, wherein said nucleic acid molecule has a sequence selected

from the sequences set forth in SEQ ID No: 2, 6, 7, or 10 or a fragment thereof.

32. A method of treating a subject with a lymphoma comprising a bcl-6-expressing lymphoma cell, comprising contacting said subject with a vector expressing a nucleic acid molecule complementary to a region of a ribonucleic acid molecule encoding said bcl-6 protein, thereby treating a subject with cancer comprising a bcl-6-expressing cell.
33. The method of claim 32, wherein said lymphoma is a non-Hodgkin's lymphoma.
34. The method of claim 32, wherein said vector is a lentiviral vector.
35. The method of claim 32, wherein said nucleic acid molecule is an oligodeoxyribonucleic acid (ODN) molecule.
36. The method of claim 32, wherein said nucleic acid molecule has a sequence selected from the sequences set forth in SEQ ID No: 2, 6, 7, or 10 or a fragment thereof.
37. A method of inducing apoptosis in a bcl-6-expressing cell, comprising contacting said bcl-6-expressing cell with a vector expressing a nucleic acid molecule corresponding to a region of a ribonucleic acid molecule encoding said bcl-6 protein, thereby inducing apoptosis in a bcl-6-expressing cell.
38. The method of claim 37, wherein said cell is a lymphoma cell.

39. The method of claim 38, wherein said lymphoma cell is a non-Hodgkin's lymphoma cell.
40. The method of claim 37, wherein said vector is a lentiviral vector.
41. The method of claim 37, wherein said nucleic acid molecule is a short interfering
5 ribonucleic acid (siRNA) molecule.
42. The method of claim 37, wherein said nucleic acid molecule is a short hairpin RNA (shRNA) molecule.
43. The method of claim 45, wherein said region has a sequence complementary to the sequences set forth in SEQ ID No: 2, 6, 7, or 10 or a fragment thereof.
- 10 44. A method of treating a subject with a lymphoma comprising a bcl-6-expressing lymphoma cell, comprising contacting said subject with a vector expressing a nucleic acid molecule corresponding to a region of a ribonucleic acid molecule encoding said bcl-6 protein, thereby treating a subject with cancer comprising a bcl-6-expressing cell.
- 15 45. The method of claim 44, wherein said lymphoma is a non-Hodgkin's lymphoma.
46. The method of claim 44, wherein said vector is a lentiviral vector.
47. The method of claim 44, wherein said nucleic acid molecule is a short interfering

ribonucleic acid (siRNA) molecule.

48. The method of claim 44, wherein said nucleic acid molecule is a short hairpin RNA (shRNA) molecule.
49. The method of claim 44, wherein said region has a sequence complementary to the sequences set forth in SEQ ID No: 2, 6, 7, or 10 or a fragment thereof.
50. An isolated nucleic acid molecule having a sequence selected from the sequences set forth in SEQ ID No: 1-10.
51. An oligo-deoxyribonucleic acid (ODN) molecule having a sequence corresponding to the isolated nucleic acid molecule of claim 50 or a fragment thereof, wherein said fragment is about 21-23 nucleotide in length.
52. A composition comprising the isolated nucleic acid molecule of claim 50.
53. A vector comprising the isolated nucleic acid molecule of claim 50.
54. A cell comprising the isolated nucleic acid molecule of claim 50.
55. An isolated nucleic acid molecule having a sequence complementary to a sequence selected from the sequences set forth in SEQ ID No: 1-10.
56. A short interfering ribonucleic acid (siRNA) molecule having a sequence corresponding to a fragment of the isolated nucleic acid molecule of claim 55,

wherein said fragment is about 21-23 nucleotide in length.

57. A short hairpin RNA (shRNA) molecule comprising a sequence corresponding to a fragment of the isolated nucleic acid molecule of claim 55, wherein said fragment is about 19-23 nucleotide in length.
- 5 58. A composition comprising the isolated nucleic acid molecule of claim 55.
59. A vector comprising the isolated nucleic acid molecule of claim 55.
60. A cell comprising the isolated nucleic acid molecule of claim 55.